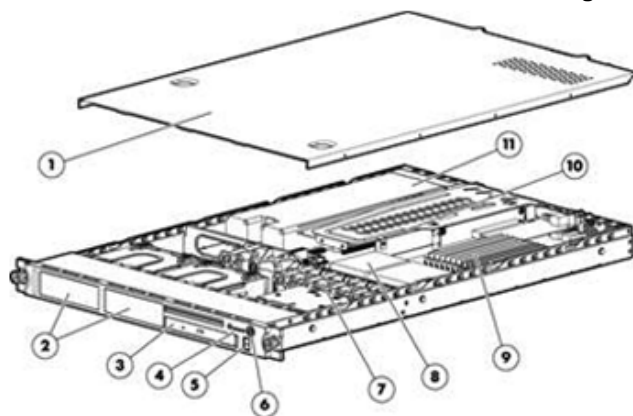


# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

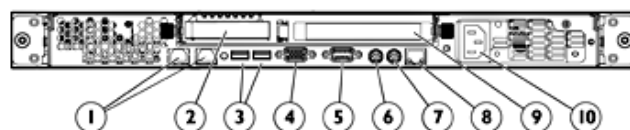
### Overview

#### Hot Plug SAS/SATA Models



#### Front View:

1. Access panel
2. Two Non-Hot Plug SATA 3.5" Hard Drive Bays or Two Hot Plug SAS/SATA 3.5" Hard Drive
3. Optional CD- or DVD-ROM drive
4. System LEDs
5. USB Port
6. Power on/off
7. System Fans
8. Quad-Core and Dual-Core Intel® Xeon™ Processors (Supports up to Two)
9. PC2-5300 Fully Buffered DIMMs (DDR2-667) memory slots
10. Expansion Slots:  
Non-Hot Plug Models - Two available PCI-Express slots  
Hot-Plug Models - One available PCI-Express slot
11. Power Supply (650 Watts)
12. SAS/SATA Hot Plug Backplane (Hot Plug SAS/SATA Model)



#### Rear View:

1. Two GbE LAN ports for NIC 1 and NIC 2 (RJ-45)
2. Low-Profile PCI Express x8/PCI-X riser board slot cover
3. Rear USB ports
4. Video Port
5. Serial Port
6. PS/2 Keyboard Port
7. PS/2 Mouse Port
8. LO100i 10/100 Mbps LAN port for IPMI management (RJ-45)
9. Standard height/full-height PCI Express x16/PCI-X riser board
10. Power Supply Cable Socket

### What's New

- One year of 24 x 7 HP Software Technical Support and Update Service included with Insight Control management suites and select ProLiant Essentials Licenses.

### At A Glance



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Overview

- **Processors:**
  - Supports up to two Quad-Core and Dual-Core Intel Xeon processors: 5300 and 5100 sequence
    - Quad-Core Intel Xeon processors 5300 sequence with 8MB Level 2 cache
    - Dual-core Intel Xeon processor 5100 sequence with 4MB Level 2 cache
  - Intel 5000X Chipset
- **Memory:**
  - Supports up to 32 GB PC2-5300 Fully Buffered DIMMs (DDR2-667) with Advanced ECC
- **Internal Drive Support:**
  - Supports up to two:
    - Non-Hot Plug Serial ATA (SATA) 3.5"hard drives; or
    - Hot Plug Serial Attached SCSI (SAS/Serial ATA (SATA) 3.5"hard drives
  - Internal storage capacity of up to 1.5TB (2 x 750GB Hot Plug 3.5" SATA hard drives), 1 TB (2 x 500 Non-Hot Plug SATA hard drives) or 600GB (2 x 300GB Hot Plug 3.5" SAS hard drives)
- **Network Controller:**
  - Two embedded NC320i PCIe Gigabit Server Adapters
- **Storage Controllers:**
  - HP Embedded SATA RAID Controller on Non-Hot Plug SATA Models
  - HP 8 Internal Port SAS HBA with RAID 0,1 on Hot Plug SAS/SATA Models
  - HP Smart Array E500 Controller
  - HP Smart Array E200 Controller
  - HP SC11Xe Host Bus Adapter
  - HP SC44Ge Host Bus Adapter
- **Expansion Slots:**
  - Non-Hot Plug Models:
    - Two available PCI Express slots:
      - Slot 1: full-length/full-height PCI-Express x16
      - Slot 2: low-profile/half-height PCI-Express x8
  - Hot Plug Models:
    - One available PCI-Express slot:
      - Slot 1: full-length/full-height PCI-Express x16
      - Slot 2: low-profile/half-height PCI-X slot populated by the SAS/SATA storage controller
- **Management:**
  - IPMI 2.0 support
  - HP Lights Out 100i Remote Management with new licensed key activated upgrades for Virtual KVM and virtual media support
  - ROM Setup Utility
- **USB Ports:**
  - Four USB ports (two front, two rear)
- **Optical Drive:**
  - Support for one (optional): CD-ROM, DVD-ROM, DVD RW, DVD/CD RW
- **Power Supply:**
  - 650W Power Supply (Non-Hot Plug, Autoswitching)
- **Additional Features:**
  - Support for:
    - NVIDIA Quadro FX3500 256MB PCIe graphics card
    - NVIDIA Quadro FX1500 256MB PCIe graphics card
- **Form Factor:**
  - 1U rack models
- **Deployment/Serviceability:**
  - Tool-less access to all system components for easy in rack serviceability
- **Warranty:**
  - Protected by HP Services, including a one-year, limited warranty, Next Business Day 1, year on-site limited Global warranty - Certain restrictions and exclusions apply



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Standard Features

**NOTE:** For a brief, printer friendly data sheet that describes this product and informs you of the essential capabilities and specifications, please visit: <http://h71028.www7.hp.com/ERC/downloads/4AA0-6065ENW.pdf>

**NOTE:** For the Standard Features shipped in the Factory Integrated Models, please see the "Configuration Information - Factory Integrated Models" section.

<b>Processor</b> One of the following depending on Model	Quad-Core Intel Xeon processor X5355 (2.66 GHz, 120 W, 1333 MHz Front Side Bus FSB)*
	Quad-Core Intel Xeon processor E5345 (2.33 GHz, 80 W, 1333 MHz FSB)
	Quad-Core Intel Xeon processor E5335 (2.00 GHz, 80 W, 1333 MHz FSB)*
	Quad-Core Intel Xeon processor L5320 (1.86 GHz, 50 W, 1066 MHz FSB, Low Voltage)*
	Quad-Core Intel Xeon processor E5320 (1.86 GHz, 80 W, 1066 MHz FSB)*
	Quad-Core Intel Xeon processor E5310 (1.60 GHz, 80 W, 1066 MHz FSB)
	Dual-Core Intel® Xeon™ processor 5160 (3.00 GHz, 80 W, 1333 MHz FSB)
	Dual-Core Intel® Xeon processor 5150 (2.66 GHz, 65 W, 1333 MHz FSB)*
	Dual-Core Intel® Xeon processor 5148 (2.33 GHz, 40 W, 1333 MHz FSB, Low Voltage)*
	Dual-Core Intel® Xeon processor 5140 (2.33 GHz, 65 W, 1333 MHz FSB)
	Dual-Core Intel® Xeon processor 5130 (2.0 GHz, 65 W, 1333 MHz FSB)*
	Dual-Core Intel® Xeon processor 5110 (1.60 GHz, 65 W, 1066 MHz FSB)
	*Available through Configure To Order only. See Factory Integration Models section for more details.

<b>Upgradeability</b>	Upgradeable to two processors
	Future upgradeable to Xeon Series 5300 Quad-Core, or 5100 Dual-Core processors (Please contact your regional sales support to determine quad core upgradeability. Some of the earlier shipping models may not support this upgrade)

<b>Chipset</b>	Intel 5000X Chipset
----------------	---------------------

<b>Cache Memory</b>	8MB (2 x 4MB) Level 2 cache (5300 sequence)
	4MB (1 x 4MB) Level 2 cache (5100 sequence)

<b>Memory Protection</b>	Memory mirroring with Advanced ECC capabilities
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<b>Memory</b>	Type	PC2-5300 Fully Buffered DIMMs (DDR2-667)	
	Standard	1 GB	(2 x 512 MB)
	Maximum	32 GB	(8 x 4 GB)

<b>Network Controller</b>	Two embedded NC320i PCIe Gigabit Server Adapters
---------------------------	--



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Standard Features

Expansion Slots	Slot Number	Bus Speed	Bus Number*	Device Number**	Hot Plug (Y/N)	PCI Voltage	Notes
	1	x16 PCI-Express	1	0	N	3.3 volts	Full length, full height
	1	PCI-X***	5	1	N	3.3 volts	Full length, full height
	2	x8 PCI-Express	6	3	N	3.3 volts	Low-profile
	2	PCI-X***	5	1	N	3.3 volts	Low-profile

**NOTE:** All slots can accept universal keyed PCI cards

\* Default bus assignment. Inserting cards with PCI bridges may alter the actual bus assignment number.

\*\* Slots are enumerated differently based on OS. MS OS's enumerate from lowest to highest Device ID by bus (starting with the lowest bus).

\*\*\* PCI-X bus speed will be 133MHz when only one PCI-X card is installed. It will be 100MHz when both slots have PCI-X cards installed.

<b>Storage Controller</b>	Non-Hot Plug SATA Models	HP Embedded SATA RAID Controller (integrated into the south-bridge) supporting SW RAID 0,1
	Hot Plug SAS/SATA Models	HP 8 Internal Port SAS HBA with RAID 0,1

**NOTE:** A diskette drive is needed to install storage controller drivers during a Windows operating system installation from a CD.

<b>Storage</b>	<b>Optical Drives:</b>	
	DVD-ROM	8x IDE (ATAPI) DVD-ROM drive, slim (optional)
	CD-ROM	24x IDE (ATAPI) CD-ROM drive (optional)
	DVD RW	8x IDE (ATAPI) DVD-ROM drive, slim (optional)
	DVD/CD RW	24x IDE (ATAPI) CD-ROM drive (optional)
	Diskette Drives	Via USB only
	<b>Drive Bays:</b>	
	Non-Hot Plug SATA	Up to 2 non-hot plug SATA 3.5" drives
	Hot-Plug SAS/SATA	Up to 2 hot plug SAS/SATA 3.5" drives

<b>Maximum Internal Storage</b>	Non-Hot Plug SATA	1TB	2 x 500GB
	Hot Plug SATA	1.5TB	2 x 750GB
	Non-Hot Plug SAS	600GB	2 x 300GB
	Hot Plug SAS	600GB	2 x 300GB



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Standard Features

Interfaces	Parallel	None
	Network RJ-45 (Ethernet)	2 10/100/1000 NIC ports (plus 1 dedicated for the HP ProLiant Lights Out 100i Remote Management)
	Serial	1
	Pointing Device (Mouse)	1
	Graphics	1
	Keyboard	1
	USB	4 (two front, two rear)

**NOTE:** Please see the following URL for additional information regarding USB support:  
<http://h18004.www1.hp.com/products/servers/platforms/usb-support.html>.

Graphics	Integrated on the system board: 1280 x 1024 at 8bpp (bits per pixel) or $2^8 = 256$ colors
	or 1024 x 768 at 16bpp (bits per pixel) or $2^{16} = 65536$ or 64k colors

Form Factor	Rack Mount (1U), (1.75 in/4.45 cm)
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ProLiant Essentials Foundation Pack Software	Optional ProLiant Essentials Value Packs	Optional software offerings that selectively extend the functionality of an Adaptive Infrastructure to address specific business problems and needs: <ul style="list-style-type: none"><li>• Rapid Deployment Pack (RDP) is an automated deployment and provisioning solution for all ProLiant servers. RDP includes the ProLiant Integration Module featuring ProLiant server pre-configured events for OS installation, and optimized software drivers, firmware and management agents. Every RDP disc includes 10-node trial licenses for evaluation purposes. RDP requires a license for each server deployed and is available for purchase with HP servers. For more information, visit: <a href="http://www.hp.com/servers/rdp">http://www.hp.com/servers/rdp</a>.</li><li>• Server Migration Pack - The Server Migration Pack automates the manual processes required for migrating servers between physical or virtual platforms (P2V, V2P, and V2V).</li><li>• Virtualization Management Software - Get the most out of server virtualization by unifying the management of physical and virtual servers in HP Systems Insight Manager. The Virtual Machine Management Pack plug-in provides central management and control of VMware and Microsoft virtual machines and provides physical host to virtual machine association. The Server Migration Pack plug-in automates the manual task of migrating servers between physical or virtual platforms.</li><li>• Vulnerability and Patch Management Pack (offered exclusively through the Insight Control suites) - identifies and remediates software security vulnerabilities due to missing patches as well operating system configurations that can be exploited by viruses, worms, and other blended threats.</li></ul>



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Standard Features

**NOTE:** Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to

<http://www.hp.com/servers/proliantessentials> or the various ProLiant Essentials Value Pack product QuickSpecs for more information.

**NOTE:** For more information regarding ProLiant Essentials Software, please see the following URL:

<http://www.hp.com/servers/proliantessentials>.

#### Industry Standard Compliance

ACPI V2.0 Compliant  
PCI 2.2 Compliant  
PXE Support  
WOL Support  
Microsoft® Logo certifications  
IPMI 2.0 Compliant

#### Manageability

HP Lights-Out 100i Standard providing the following OS-independent remote control capabilities:

- Virtual power
- System event log access
- System health
- Remote Serial console (serial redirection)
- Browser, Telnet access
- SM-CLP compliant
- IPMI 2.0 compliant

HP Lights-Out 100i Select Pack providing license key activated upgrades to the following:

- Virtual media (Floppy and CD)
- Secure Socket Layer Encryption
- Secure Shell Encryption

HP Lights-Out 100i Advanced Pack providing license key activated upgrades to the following:

- Virtual KVM (KVM over IP functionality embedded on the system board) plus all of the LO100i Select Pack features above.

#### Security

Power-on password  
Setup password

#### Server Power Cords

One Highline IEC Power cord ships standard (for connection to a Power Distribution Unit)

**NOTE:** Rack models ship standard with an IEC cable.

Localized cables included with geographic specific models in other world regions.

#### UPS and PDU Power Cord Matrix

Please see the UPS and PDU cable matrix that lists cable descriptions, requirements, and specifications for UPS and PDU units:

<ftp://ftp.compaq.com/pub/products/servers/ProLiantstorage/power-protection/powercordmatrix.pdf>.





# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Standard Features

<b>Power Supply</b>	650 Watts, auto-switching, PFC (Power Factor Correcting)
<b>System Fans</b>	6 system fans ship standard; Non-hot plug, Non-redundant
<b>OS Support</b>	<p>Microsoft Windows® 2000 Server (32-bit) Microsoft Windows 2000 Advanced Server (32-bit) Microsoft Windows 2003 and Microsoft Windows 2003/R2 Standard Edition (32-bit) Microsoft Windows 2003 and Microsoft Windows 2003/R2 Enterprise Edition (32-bit) Microsoft Windows 2003 and Microsoft Windows 2003/R2 Web Edition (32-bit) Microsoft Windows 2003 and Microsoft Windows 2003/R2 for Extended Systems Standard Edition (64-bit) Microsoft Windows 2003 and Microsoft Windows 2003/R2 for Extended Systems Enterprise Edition (64-bit) Red Hat Enterprise Linux SUSE Linux Enterprise Server</p> <p><b>NOTE:</b> For an up-to-date listing of the latest OS support matrix, please see: <a href="http://www.hp.com/go/supportos">http://www.hp.com/go/supportos</a></p> <p><b>NOTE:</b> For an up-to-date listing of the latest drivers available for the HP ProLiant DL140 G3, please see: <a href="http://h18023.www1.hp.com/support/files/server/us/index.html">http://h18023.www1.hp.com/support/files/server/us/index.html</a></p> <p><b>NOTE:</b> For more complete and up-to-date information on how to buy server operating systems from HP please visit the OS product site at: <a href="http://h18004.www1.hp.com/products/servers/software/OEM.html">http://h18004.www1.hp.com/products/servers/software/OEM.html</a></p> <p><b>NOTE:</b> Drivers may also found on the base media for some Linux OS's. When configuring your server, please consult your base media driver base, or visit HP.com at: <a href="http://h18023.www1.hp.com/support/files/server/us/index.html">http://h18023.www1.hp.com/support/files/server/us/index.html</a></p> <p><b>NOTE:</b> For more Linux OS support &amp; certification information, please visit our the ProLiant &amp; Bladesystem Server Linux matrix <a href="http://h18004.www1.hp.com/products/servers/linux/hpLinuxcert.html">http://h18004.www1.hp.com/products/servers/linux/hpLinuxcert.html</a></p>

### Rack Airflow Requirements

#### Rack 10000 series Cabinets

The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. The 10000 Series Racks provide enhanced airflow for maximum cooling, allowing these racks to be fully loaded with servers using the latest processors.

**CAUTION:** If a third-party rack is used, observe the following additional requirements to ensure adequate airflow and to prevent damage to the equipment:

Front and rear doors: If your 42U server rack includes closing front and rear doors, you must allow 5,350 sq cm (830 square inches) of hole evenly distributed from top to bottom to permit adequate airflow (equivalent to the required 64 percent open area for ventilation).

Side: The clearance between the installed rack component and the side panels of the rack must be a minimum of 7 cm (2.75 inches)

**CAUTION:** Always use blanking panels to fill all remaining empty front panel U-spaces in the rack. This arrangement ensures proper airflow. Using a rack without blanking panels results in improper cooling that can lead to thermal damage.

**NOTE:** For additional information, refer to the Setup and Installation Guide or the Documentation CD provided with the server, or to the server documentation located in the Support section at the following URL: <http://h18000.www1.hp.com/products/servers/proliantdl140/index.html>



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Standard Features

#### Telco Rack Support

Telco Rack Kit:

Support for all 2-post Telco racks requires the use of the standard rack kit and an additional option kit from Rack Solutions.

<http://www.racksolutions.com/hp>

#### Factory Express Portfolio for Servers and Storage

HP Factory Express offers configuration, customization, integration and deployment services for HP servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed.

Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. HP products supported through Factory Express include a wide array of servers and storage: HP Integrity, HP ProLiant, HP ProLiant Server Blades, HP BladeSystem, HP 9000 servers as well as the MSA1000, VA7xxx, EVA, XP, rackable tape libraries and configurable network switches.

For more information on Factory Express services for your specific server model please contact your sales representative or go to <http://www.hp.com/go/factory-express>.

#### HP Enterprise Configurator

The HP eCo-Enterprise Configurator now provides factory default racking for our HP hardware portfolio. This approach is aligned with our strategic direction to meet the needs and expectations of our valued customers. If you require "custom" rack configuration, please contact HP's Customer Business Center or an Authorized Partner for assistance.

#### Service and Support

This product is covered by a global limited warranty and supported by HP Services and a worldwide network of resellers and service providers. Hardware diagnostic support and repair is available for one year from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Additional support may be covered under the warranty or available for an additional fee. Enhancements to warranty services are available through HP Care Pack services or customized service agreements.

**NOTE:** Server Warranty includes 1 year Parts, 1 year Labor, 1-year on-site support. Additional information regarding worldwide limited warranty and technical support is available at:

<http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>

HP Care Pack services include coverage for the HP branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as 22" and smaller external monitors and tower UPS options up to 3kVA; these items will be covered at the same service level and for the same coverage period as the server. Coverage of UPS Battery is not included, standard warranty terms & conditions apply. For servers or storage systems installed within a rack, service also covers all HP qualified rack options installed within the same rack.

HP services provide continuous care and support expertise with committed response designed to meet your IT and business needs.

To fully capitalizing on your HP ProLiant servers' capabilities requires a service partner who thoroughly understands your server technology and systems environment. HP Services, an industry leader in provision of multi venter support solutions provides a range of support services designed to meet the varying needs of business. Whether an SMB or large global corporation HP has a ProLiant server support offer to help you speedily deploy and maximize system uptime.





# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Standard Features

Enhanced Care - Minimum recommended service support offer designed to ensure customers have access to expert assistance, whenever they need it.

- *Next Business Day on site coverage, 3 Years*

Continuous Care - Recommended service, delivering cost-effective support options designed to extend HP Services committed response and guaranteed fix times, designed to speed problem identification and resolution.

- *4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years*

Total Care - Highest HP Support service level recommend to help increase IT performance and availability with comprehensive, integrated hardware and software services

- *4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years*

Deployment Services - HP Installation and Start Up services designed to take time, risk, and worry out of the deployment of ProLiant servers - and free customers IT support staff to focus on what they do best, their business.

- *Installation of a ProLiant server as per Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays*

For a complete listing of service offerings and information visit:

<http://www.hp.com/services/proliantservices>

<http://www.hp.com/go/proliant/carepack>



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### HPC Interconnects

**NOTE:** High Performance Computing (HPC) interconnect technologies are available for the DL140 under the Cluster Platform product portfolio. These high-speed interconnects are fully supported by HP when they are part of these configure to order clusters. Solutions can be defined with a lot of flexibility with the help of configuration tools. Please visit the following URL to configure HPC Clusters with InfiniBand, Gigabit Ethernet or Myrinet Interconnects:  
<http://www.hp.com/techservers/clusters/ucp/index.html>

HPC Interconnect	InfiniBand	PCI-X and PCI-Express adapters
	Gigabit Ethernet	Use embedded ports
	Myrinet XP	PCI-X Rev D, Rev E and Rev F adapters



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Models

#### Non Hot Plug Serial ATA (SATA) Models

<b>HP DL140G3 E5345</b> 417748-xx1	<b>Processor(s)</b> <i>One of the following depending on model</i>	(1) Quad-Core Intel Xeon processor E5345 (2.33 GHz, 80 W, 1333 MHz FSB) (1) Quad-Core Intel Xeon processor E5310 (1.60 GHz, 80 W, 1066 MHz FSB)
<b>HP DL140G3 E5310</b> 417746-xx1		(1) Dual-Core Intel Xeon processor 5160 (3.00 GHz, 80 W, 1333 MHz FSB)
<b>HP DL140G3 5160</b> 417759-xx1		(1) Dual-Core Intel Xeon processor 5140 (2.33 GHz, 65 W, 1333 MHz FSB)
<b>HP DL140G3 5140</b> 417757-xx1		(1) Dual-Core Intel Xeon processor 5110 (1.60 GHz, 65 W, 1066 MHz FSB)
<b>HP DL140G3 5110</b> 417756-xx1	<b>Cache Memory</b>	8MB (2 x 4MB) Level 2 cache (5300 sequence) 4MB (1 x 4MB) Level 2 cache (5100 sequence)
	<b>Memory</b>	1 GB (2 x 512 MB) PC2-5300 DDR2 Fully Buffered DIMMs (667MHz) with Advanced ECC capabilities
	<b>Network Controller</b>	Two embedded NC320i PCIe Gigabit Server Adapters
	<b>Storage Controller</b>	HP Embedded SATA RAID Controller
	<b>Hard Drive</b>	80GB NHP SATA HDD
	<b>Internal Storage</b>	1TB maximum (2 x 500GB Non-Hot plug 3.5" SATA hard drives)
	<b>Optical Drive</b>	Optional CD-ROM, DVD-ROM, DVD RW, DVD/CD RW
	<b>Form Factor</b>	Rack Mount (1U)

#### Hot Plug Serial ATA (SATA)/Serial Attached SCSI (SAS) Models

<b>HP DL140G3 E5345</b> 417749-xx1	<b>Processor(s)</b> <i>One of the following depending on model</i>	(1) Quad-Core Intel Xeon processor E5345 (2.33 GHz, 80 W, 1333 MHz FSB) (1) Quad-Core Intel Xeon processor E5310 (1.60 GHz, 80 W, 1066 MHz FSB)
<b>HP DL140G3 E5310</b> 417747-xx1		(1) Dual-Core Intel Xeon processor 5160 (3.00 GHz, 80 W, 1333 MHz FSB)
<b>HP DL140G3 5160</b> 417755-xx1		(1) Dual-Core Intel Xeon processor 5140 (2.33 GHz, 65 W, 1333 MHz FSB)
<b>HP DL140G3 5140</b> 417754-xx1		(1) Dual-Core Intel Xeon processor 5110 (1.60 GHz, 65 W, 1066 MHz FSB)
<b>HP DL140G3 5110</b> 417753-xx1	<b>Cache Memory</b>	8MB (2 x 4MB) Level 2 cache (5300 sequence) 4MB (1 x 4MB) Level 2 cache (5100 sequence)
	<b>Memory</b>	1 GB (2 x 512 MB) PC2-5300 DDR2 Fully Buffered DIMMs (667MHz) with Advanced ECC capabilities
	<b>Network Controller</b>	Two embedded NC320i PCIe Gigabit Server Adapters
	<b>Storage Controller</b>	HP 8 Internal Port SAS HBA with RAID
	<b>Hard Drive</b>	None ship standard (up to 2 Hot Plug SATA or SAS drives supported)
	<b>Internal Storage</b>	1.5TB max. (2 x 750GB Hot Plug 3.5" SATA hard drives) or 600GB (2 x 300GB Hot Plug 3.5" SAS hard drives)
	<b>Optical Drive</b>	Optional CD-ROM, DVD-ROM, DVD RW, DVD/CD RW
	<b>Form Factor</b>	Rack Mount (1U)
	<b>Availability</b>	Hot Plug Hard Drives



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Models

Country Code Key	XX=00	U.S.
	XX=29	Japan
	XX=37	APD
	XX=42	Euro
	XX=AA	CN



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Configuration Information - Factory Integrated Models (North America only)

**NOTE:** For Configure to Order requirements within EMEA region, please consult local Sales Contact.

**NOTE:** HP does not allow factory integration of options into standard models listed above.

Configure-to-order servers must start with a CTO Chassis.

**NOTE:** This product offering does not support HP Factory Express Server Configuration Level 1.

**NOTE:** FIO indicates that this option is a Factory Installable Option.

**NOTE:** This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Contact your local sales representative for additional information.

### Step 1: Base Configuration (choose one of the following configurable models)

#### Non-Hot Plug Model

HP ProLiant DL140 G3 Non- Hot Plug SATA Rack CTO Chassis (North America) 409023-B21

#### Factory Integrated Model ships with:

Two integrated Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)

Two available PCI-Express slots:

Slot 1: full-length/full-height PCI-Express x16

Slot 2: low-profile/half-height PCI-Express x8

(**NOTE:** Optional PCI-X option kit includes: Slot 1: full-length/full-height PCI-X 100; Slot 2: low-profile/half-height PCI-X 100. PCI-X slots are 64 bits; 133 MHz capable if only one PCI-X card is installed in the server)

HP Embedded SATA RAID Controller

650 Watt Power Supply

One Highline IEC Power Cord

6 Non-Hot Plug Fans

Rack (1U), (1.75 in / 4.45 cm)

HP ProLiant DL140 G3 Hot Plug SAS/SATA Rack CTO Chassis (North America) 409024-B21

#### Factory Integrated Model ships with:

Two integrated Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)

One available PCI-Express slot:

Slot 1: full-length/full-height PCI-Express x16

Slot 2: low-profile/half-height PCI-X slot populated by the SAS/SATA storage controller

(**NOTE:** Optional PCI-X option kit includes: Slot 1: full-length/full-height PCI-X 100; and Slot 2: low-profile/half-height PCI-X 100. PCI-X slots are 64 bits; 133 MHz capable if only one PCI-X card is installed in the server)

One HP SAS/SATA Host Cable Kit

One Hot Plug Backplane Option Kit

650 Watt Power Supply

One Highline IEC Power Cord

6 Non-Hot Plug Fans

Rack (1U), (1.75 in / 4.45 cm)



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

*Configuration Information - Factory Integrated Models (North America only)*

### Step 2: Choose Required Options (only one of the following from each list unless otherwise noted)

Processors	Quad-Core Intel Xeon processor X5355 (2.66 GHz, 120 W, 1333 MHz FSB) FIO BASE	409279-L21
	Quad-Core Intel Xeon processor E5345 (2.33 GHz, 80 W, 1333 MHz FSB) FIO BASE	409159-L21
	Quad-Core Intel Xeon processor E5335 (2.00 GHz, 80 W, 1333 MHz FSB) FIO BASE	442992-L21
	Quad-Core Intel Xeon processor L5320 (1.86GHz, 50W, 1066 MHz FSB), FIO BASE	442995-L21
	Quad-Core Intel Xeon processor E5320 (1.86 GHz, 80 W, 1066 MHz FSB) FIO BASE	409157-L21
	Quad-Core Intel Xeon processor E5310 (1.60 GHz, 80 W, 1066 MHz FSB) FIO BASE	409278-L21
	Dual-Core Intel Xeon processor 5160 (3.00 GHz, 80 W, 1333 MHz FSB) FIO BASE	417786-L21
	Dual-Core Intel Xeon processor 5150 (2.66 GHz, 65 W, 1333 MHz FSB) FIO BASE	417784-L21
	Dual-Core Intel Xeon processor 5148 (2.33 GHz, 40 W, 1333 MHz FSB) FIO BASE	433253-L21
	Dual-Core Intel Xeon processor 5140 (2.33 GHz, 65 W, 1333 MHz FSB) FIO BASE	417774-L21
	Dual-Core Intel Xeon processor 5130 (2.0 GHz, 65 W, 1333 MHz FSB) FIO BASE	417772-L21
	Dual-Core Intel Xeon processor 5110 (1.60 GHz, 65 W, 1066 MHz FSB) FIO BASE	417770-L21
Memory	1 GB FBD PC2-5300 2X512 Kit	397409-B21
	2 GB FBD PC2-5300 2X1GB Kit	397411-B21
	4 GB FBD PC2-5300 2X2GB Kit	397413-B21
	8 GB FBD PC2-5300 2X4GB Kit	397415-B21





# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Configuration Information - Factory Integrated Models (North America only)

<b>Hard Drive</b>	<b>Serial-ATA (SATA) Non-Hot Plug Hard Drives</b> (To be used with Non-Hot Plug CTO Chassis Models Only)	
	HP 80GB 1.5G SATA 7.2K NHP 3.5" HDD	383410-B21
	HP 160GB 1.5G SATA 7.2K NHP 3.5" HDD	411275-B21
	HP 250GB 1.5G SATA 7.2K NHP 3.5" HDD	411276-B21
	HP 500GB 1.5G SATA 7.2K NHP 3.5" HDD, FIO*	404469-B21
	<i>*Factory Integrated Only</i>	
	<b>Serial-ATA (SATA) Hot Plug Hard Drives</b> (To be used with SAS/SATA Hot Plug CTO Chassis Models Only)	
	HP 80GB SATA 7.2K Hot Plug 3.5" HDD	349237-B21
	HP 160GB SATA 7.2K Hot Plug 3.5" HDD	349238-B21
	HP 250GB SATA 7.2K Hot Plug 3.5" HDD	349239-B21
	HP 500GB SATA 7.2K Hot Plug 3.5" HDD	395473-B21
	HP 750GB SATA 7.2K Hot Plug 3.5" HDD	432341-B21
	<b>Serial-Attached SCSI (SAS) Hot Plug Hard Drives</b> (To be used with SAS/SATA Hot Plug CTO Chassis Models Only)	
	<b>NOTE: A SAS HBA or Array Controller is required.</b>	
	HP 36GB 3G SAS 15K 3.5" SP HDD	375868-B21
<b>Storage Controllers</b>	HP 72GB 3G SAS 15K 3.5" SP HDD	375870-B21
	HP 146GB 3G SAS 15K 3.5" SP HDD	375872-B21
	HP 300GB 3G SAS 15K 3.5" SP HDD	431944-B21
	HP 8 Internal Port SAS HBA with RAID	347786-B21
	<b>NOTE: For use with Hot Plug SAS/SATA CTO Chassis models. Required only when upgrading from a non-hot plug to a hot-plug model.</b>	
	<b>NOTE: The selection HP 8 Internal Port SAS HBA with RAID requires the purchase of the PCI-X Riser Option kit (P/N 409347-B21)</b>	
	HP Smart Array E500/256MB Controller (Standard RAID 0,1, 1+0)	435129-B21
	256MB Battery-backed write cache upgrade for RAID 5 support	383280-B21
	Note: when installing a battery-backed write cache module, the HP Smart Array E500 must be installed in the full-length PCI slot	
	HP Smart Array E200/128 BBWC Controller	411508-B21
	128-MB BBWC (Battery-Backed Write Cache) Enabler	351580-B21
	HP Single Channel U320 SCSI Controller	374654-B21
	HP SC11Xe Host Bus Adapter	412911-B21
	<b>NOTE: U20 HBA with tape support only.</b>	
	HP SC44Ge Host Bus Adapter	416096-B21
	<b>NOTE: SAS HBA</b>	

### Step 3: Choose Additional Options for Factory Integration

**NOTE:** For additional options, please refer to the "Options" section below. Some options may not be available for factory integration. Please contact an HP sales representative for additional information.



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Options

<b>ProLiant Essentials Licensing and Packaging</b>	<b>HP Insight Control Environment</b>	
	HP Insight Control Environment, No Media 1-Server License including 1 year of 24x7 Technical Support and Updates	452148-B21
	<b>NOTE:</b> Contains 1 license for each of RDP, PMP, VPM, IPM and iLO Advanced. Includes one year of 24 x 7 HP Software Technical Support and Update Service.	
	<b>NOTE:</b> For additional Insight Control Environment License Kits please see the QuickSpecs at: <a href="http://h18000.www1.hp.com/products/quickspecs/12631_div/12631_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12631_div/12631_div.HTML</a>	
	<b>ProLiant Essentials Rapid Deployment Pack</b>	
	ProLiant Essentials Rapid Deployment Pack No Media 1-Server License including 1 year of 24x7 Technical Support and Updates	452151-B21
	<b>NOTE:</b> This license allows 1 server to be deployed and managed via RDP	
	<b>NOTE:</b> For additional ProLiant Essentials Rapid Deployment Pack License Kits please see the QuickSpecs at: <a href="http://h18000.www1.hp.com/products/quickspecs/11053_div/11053_div.HTML">http://h18000.www1.hp.com/products/quickspecs/11053_div/11053_div.HTML</a>	
	<b>ProLiant Essentials Server Migration Pack</b>	
	ProLiant Essentials Server Migration Pack, No Media, 1-Migration License	435663-B21
	<b>NOTE:</b> This license allows 1 P2V, V2P, or V2V migration. Contains one license with a unique license activation key and documentation	
	<b>NOTE:</b> For additional ProLiant Server Migration Pack License Kits please see the QuickSpecs at: <a href="http://h18000.www1.hp.com/products/quickspecs/12328_div/12238_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12328_div/12238_div.HTML</a>	
	<b>ProLiant Essentials Virtual Machine Management Pack</b>	
	ProLiant Essentials Virtual Machine Management Pack, No Media, 1-Server License, including 1 year of 24x7 Technical Support and Updates	452153-B21
	<b>NOTE:</b> For use with a single server. Contains one license with a unique license activation key and documentation	
	<b>NOTE:</b> For additional ProLiant Virtual Machine Management Pack License Kits please see the QuickSpecs at: <a href="http://h18000.www1.hp.com/products/quickspecs/12328_div/12238_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12328_div/12238_div.HTML</a>	
	<b>NOTE:</b> Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to <a href="http://www.hp.com/servers/proliantessentials">http://www.hp.com/servers/proliantessentials</a> or the various ProLiant Essentials Value Pack product QuickSpecs for more information.	
	<b>NOTE:</b> For more information regarding ProLiant Essentials Software, please see the following URL: <a href="http://www.hp.com/servers/proliantessentials">http://www.hp.com/servers/proliantessentials</a> .	
<b>Remote Management</b>	<b>ProLiant Essentials Integrated Lights-Out Select Pack and Advanced Pack</b>	
	HP Lights Out 100i Select Pack 1-Server License	413111-B21
	HP Lights Out 100i Advanced Pack 1-Server License	413115-B21
	<b>NOTE:</b> For additional ProLiant Integrated Light-Out Select Pack and Advanced Pack License Kits please see the QuickSpecs at: <a href="http://h18000.www1.hp.com/products/quickspecs/12087_div/12087_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12087_div/12087_div.HTML</a>	



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Options

<b>Processor</b>	Quad-Core Intel Xeon processor X5355 (2.66 GHz, 120 W, 1333 MHz FSB) Option Kit*	409279-B21
	Quad-Core Intel Xeon processor E5345 (2.33 GHz, 80 W, 1333 MHz FSB) Option Kit	409159-B21
	Quad-Core Intel Xeon processor E5335 (2.00 GHz, 80 W, 1333 MHz FSB) Option Kit*	442992-B21
	Quad-Core Intel Xeon processor L5320 (1.86 GHz, 50W, 1066 FSB) Option Kit*	442995-B21
	Quad-Core Intel Xeon processor E5320 (1.86 GHz, 80 W, 1066 MHz FSB) Option Kit*	409157-B21
	Quad-Core Intel Xeon processor E5310 (1.60 GHz, 80 W, 1066 MHz FSB) Option Kit	409278-B21
	Dual-Core Intel Xeon processor 5160 (3.00 GHz, 80 W, 1333 MHz FSB) Option Kit	417786-B21
	Dual-Core Intel Xeon processor 5150 (2.66 GHz, 65 W, 1333 MHz FSB) Option Kit*	417784-B21
	Dual-Core Intel Xeon processor 5148 (2.33 GHz, 40 W, 1333 MHz FSB, Low Voltage) Option Kit*	433253-B21
	Dual-Core Intel Xeon processor 5140 (2.33 GHz, 65 W, 1333 MHz FSB) Option Kit	417774-B21
	Dual-Core Intel Xeon processor 5130 (2.00 GHz, 65 W, 1333 MHz FSB) Option Kit*	417772-B21
	Dual-Core Intel Xeon processor 5110 (1.60 GHz, 65 W, 1066 MHz FSB) Option Kit	417770-B21
	*Available through Configure To Order only. See Factory Integration Models section for more details.	

<b>Memory (FBDIMMs)</b>	1 GB FBD PC2-5300 2X512 Kit	397409-B21
	2 GB FBD PC2-5300 2X1GB Kit	397411-B21
	4 GB FBD PC2-5300 2X2GB Kit	397413-B21
	8 GB FBD PC2-5300 2X4GB Kit	397415-B21



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Options

#### Hard Drives

##### **Serial-ATA (SATA) Non-Hot Plug Hard Drives** (Non-Hot Plug Models Only)

HP 80GB 1.5G SATA 7.2K NHP 3.5" HDD	383410-B21
HP 160GB 1.5G SATA 7.2K NHP 3.5" HDD	411275-B21
HP 250GB 1.5G SATA 7.2K NHP 3.5" HDD	411276-B21

**NOTE:** When purchasing systems with the 500GB Non-Hot Plug SATA drives, please reference the Configuration Information Section of this QuickSpecs to order via Configuration to Order.

##### **Serial-ATA (SATA) Hot Plug Hard Drives** (SAS/SATA Hot Plug Models Only)

**NOTE:** A SAS HBA or Array Controller is required.

HP 80GB SATA 7.2K Hot Plug 3.5" HDD	349237-B21
HP 160GB SATA 7.2K Hot Plug 3.5" HDD	349238-B21
HP 250GB SATA 7.2K Hot Plug 3.5" HDD	349239-B21
HP 500GB SATA 7.2K Hot Plug 3.5" HDD	395473-B21
HP 750GB SATA 7.2K Hot Plug 3.5" HDD	432341-B21

##### **Serial-Attached SCSI (SAS) Hot Plug Hard Drives** (SAS/SATA Hot Plug Models Only)

HP 36GB 3G SAS 15K 3.5" SP HDD	375868-B21
HP 72GB 3G SAS 15K 3.5" SP HDD	375870-B21
HP 146GB 3G SAS 15K 3.5" SP HDD	375872-B21
HP 300GB 3G SAS 15K 3.5" SP HDD	431944-B21

**NOTE:** The purchase of SAS HBA or array controller is required.

#### Graphic Cards

NVIDIA Quadro FX3500 256MB PCIe	435681-B21
NVIDIA Quadro FX1500 256MB PCIe	435703-B21

**NOTE:** Graphic cards are supported on Windows 2003 and Linux Operating Systems.

#### Optical Drives

DVD-ROM Drive (optional)	361040-B21
24x CD-ROM Drive (optional)	349046-B21
DVD-RW Drive (optional)	395498-B21
DVD/CD RW Drive (optional)	377402-B21
Multibay II DVD/CD-RW Combo Drive	PA850A

**NOTE:** When purchasing the Multibay II DVD/CD-RW Combo Drive, (P/N PA850A), the USB 2.0 Multibay II Cradle (P/N PA509A) is required.

USB 2.0 MultiBay II Cradle, External	PA509A
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**NOTE:** When purchasing the Multibay II DVD/CD-RW Combo Drive, (P/N 850A), the USB 2.0 Multibay II Cradle, (P/N PA509A) is required.



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Options

Storage Controllers	HP 8 Internal Port SAS HBA with RAID	347786-B21
	<b>NOTE:</b> For use with Hot Plug SAS/SATA models. Required only when upgrading from a non-hot plug to a hot plug model.	
	<b>NOTE:</b> The selection HP 8 Internal Port SAS HBA with RAID requires the purchase of the PCI-X Riser Option kit (P/N 409347-B21)	
	HP SAS/SATA Host Cable Kit	389650-B21
	<b>NOTE:</b> For use with Hot Plug SAS/SATA models. Required only when upgrading from a non-hot plug to a hot plug model.	
	HP Smart Array E500/256MB Controller (Standard RAID 0,1, 1+0)	435129-B21
	256MB Battery-backed write cache upgrade for RAID 5 support	383280-B21
	<b>NOTE:</b> when installing a battery-backed write cache module, the HP Smart Array E500 must be installed in the full-length PCI slot	
	HP Smart Array E200/128 BBWC Controller	411508-B21
	128-MB BBWC (Battery-Backed Write Cache) Enabler	351580-B21
	HP PCI-X Riser Board Kit	409347-B21
	Hot Plug Backplane Option Kit	409348-B21
	<b>NOTE:</b> Required when upgrading from a non-hot plug to a hot plug model	
	64-Bit/133-MHz Single Channel Ultra320 SCSI HBA G2	374654-B21
	HP SC11Xe Host Bus Adapter	412911-B21
	<b>NOTE:</b> U320 HBA with tape support only.	
	HP SC44Ge Host Bus Adapter	416096-B21
	<b>NOTE:</b> SAS HBA.	

Communications	HP NC110T PCI Express 1 Port Gigabit Server Adapter	434905-B21
	<b>NOTE:</b> Does not support Windows 2000.	
	HP NC150T PCI 4-Port Gigabit Combo Switch Adapter	367132-B21
	HP NC310F PCI-X Gigabit Server Adapter	368169-B21
	HP NC360T PCI Express Dual Port Gigabit Server Adapter	412648-B21
	HP NC364T PCI Express Quad Port Gigabit Server Adapter	435508-B21
	<b>NOTE:</b> Does not support Windows 2000.	
	HP NC373F PCI Express Multifunction Gigabit Server Adapter	394793-B21
	HP NC373T PCI Express Multifunction Gigabit Server Adapter	394791-B21
	HP NC380T PCI Express Dual Port Multifunction Gigabit Server Adapter	394795-B21
	HP NC510C PCIe 10 Gigabit Server Adapter	414129-B21
	<b>NOTE:</b> A minimum of 1 gigabyte (1 GB) of server memory is required per each NC510C adapter.	
	HP NC510F PCIe 10 Gigabit Server Adapter	414126-B21
	<b>NOTE:</b> A minimum of 1 gigabyte (1 GB) of server memory is required per each NC510F adapter.	
	HP NC7771 PCI-X Single Port Gigabit Server Adapter	290563-B21
	InfiniBand 4X PCI-E Dual Port Host Adapter	380298-B21
	InfiniBand 4X PCI-X Dual Port Host Adapter	380299-B21
	HP IB 4X DDR PCI-e DUAL PORT HCA	448397-B21
	HP IB 4X DDR PCI-e Dual Port HCA	409376-B21
	Myrinet PCI 2XP Rev-E 4MB Network Interface Card	373983-B21
	Myrinet 2XP PCI-X, Fiber F-Series, 2MB NIC	390456-B21



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Options

Myrinet-Fiber/PCI-X Interface (Dual channel Rev. D card)	360040-B21
Quadrics QsNet-II Rev BB PCI-X NIC	AC071A
<b>NOTE:</b> For HPC interconnect adapters please see the HPC Interconnect section of this QuickSpecs.	

<b>Rack Kits</b>	1U Cable Management Arm	365403-B21
	<b>NOTE:</b> Package contains two cable management arms	

<b>Tape Drives</b>	<b>USB Tape Drives</b>	
	HP StorageWorks DAT 40 USB Internal Tape Drive (Carbonite)	DW022A
	<b>NOTE:</b> HP recommends combining this tape drive with the 1U USB Rack-Mount kit (A8007A) for a complete rack-mount solution.	
	HP StorageWorks DAT 72 USB Internal Tape Drive (Carbonite)	DW026A
	<b>NOTE:</b> HP recommends combining this tape drive with the 1U USB Rack-Mount kit (A8007A) for a complete rack-mount solution.	
	<b>DAT External Tape Drive</b>	
	HP StorageWorks DAT 40 SCSI Internal Tape Drive (Carbon)	C5686C
	<b>NOTE:</b> HP recommends combining this tape drive with the 1U SCSI Rack-Mount kit (A7445B) for a complete rack-mount solution.	
	HP StorageWorks DAT 72 SCSI Internal Tape Drive (Carbon)	Q1522B
	<b>NOTE:</b> HP recommends combining this tape drive with the 1U SCSI Rack-Mount kit (A7445B) for a complete rack-mount solution.	
	<b>Ultrium External Tape Drive</b>	
	HP StorageWorks Ultrium 232 Internal Tape Drive, (Carbonite)	DW064A
	<b>NOTE:</b> HP recommends combining this tape drive with the 1U SCSI Rack-Mount kit (A7445B) for a complete rack-mount solution.	
	<b>Rack-Mount Tape Drive</b>	
	HP StorageWorks 1U SCSI Rack-Mount kit	A7445B
	<b>NOTE:</b> The 1U Rack-Mount Kit can support up to (2) half-height tape drives and is compatible with multiple Single-Ended and LVD SCSI tape drives including the DAT 24, DAT 40, DAT 72, DLT VS80, DLT VS160, Ultrium 215, Ultrium 232, Ultrium 448 and Ultrium 920 tape drives.	
	HP StorageWorks 1U USB Rack-Mount Kit	A8007A
	<b>NOTE:</b> The 1U USB Rack-Mount Kit can support up to (2) half-height tape drives and is compatible with the DAT 24 USB, DAT 40 USB and DAT 72 USB tape drives.	
	<b>NOTE:</b> When attaching to an external tape drive, autoloader or library, you must also purchase a HBA	
	<b>NOTE:</b> For a complete listing of HP tape drive offerings supported with the DL140 G3, visit <a href="http://www.hp.com/products1/storage/compatibility/tapebackup/ISS/index.html">http://www.hp.com/products1/storage/compatibility/tapebackup/ISS/index.html</a>	





# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Options

#### StorageWorks Options StorageWorks Fibre Channel HBA

**NOTE:** The following is a list of all Fibre Channel Host Bus Adapters for Windows and Linux. For detailed compatibility information please see:

<http://h18006.www1.hp.com/storage/saninfrastructure/hba.html>

HP StorageWorks 4 Gb PCI-X 2.0-to-Fibre Channel HBA	AB429A
HP StorageWorks 4 Gb PCI-X 2.0 DC-to-Fibre Channel HBA	AE369A
HP StorageWorks FC2142SR 4Gb PCI-E HBA	A8002A
HP StorageWorks FC2242SR Dual Channel 4 Gb PCI-E HBA	A8003A
HP StorageWorks FC1142SR 4Gb PCI-E HBA	AE311A
HP StorageWorks FC1242SR Dual Channel 4 Gb PCI-E HBA	AE312A
HP StorageWorks FC2143 4Gb PCI-X 2.0 HBA	AD167A

#### StorageWorks SCSI HBA

HP U320e SCSI Host Bus Adapter	AH627A
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**NOTE:** Recommended Dual Channel Ultra320 SCSI Controller for connecting multi-drive MSL tape libraries to ProLiant servers

HP StorageWorks FC2243 4Gb PCI-X 2.0 DC HBA	AD168A
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#### USB Options

HP 1GB USB 2.0 Floppy Drive Key	442085-B21
HP 256MB USB 2.0 Floppy Drive Key	442084-B21
USB 1.44-MB External Diskette Drive	DC141B
USB Floppy Drive	DC361B
HP USB-P/S2 Mouse	DC369A
HP Keyboard (USB) standard 2004	DT528A#xxx
USB 2.0 4-port HUB	DG954A

#### HP KVM Switch Options

2x1x16 IP Console Switch with Virtual Media	AF601A
4x1x16 IP Console Switch with Virtual Media	AF602A
2x16 Server Console Switch with Virtual Media	AF600A
PS/2 Virtual Media Interface Adapter, 1 pack	AF604A
<b>NOTE:</b> Requires PS/2 and one USB port on server.	
HP Server Console Switch (KVM), 0 x 1 x 8 port	336044-B21
HP Server Console Switch (KVM), 0 x 2 x 16 port	336045-B21
PS/2 Interface Adapter, 1 pack	262588-B21
PS/2 Interface Adapter, 8 pack	262587-B21
USB Interface Adapter, 1 pack	336047-B21
Serial Interface Adapter - 1 pack with power supply	373035-B21
CAT5 KVM Expansion Module	262589-B21
HP 1x4 Console Switch	AF611A
HP PS2 Server Console Cable, 6 foot, 2-Pack	AF612A
HP USB Server Console Cable, 6 foot, 2-Pack	AF613A

**NOTE:** required for supporting USB peripherals.

**NOTE:** Cat5e cables are required to connect Interface Adapters to Console Switches. Cat5e cables can be found at the following URL:

<http://www.hp.com/go/kvm>



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Options

<b>HP Serial Console Server Options</b>	HP 16 Port Serial Console Server (worldwide)	AF101A
	HP 48 Port Serial Console Server (worldwide)	AF102A
	Serial Adapter, RJ45-D89 DCE Female, 1-pack	AF103A
	Serial Adapter, RJ45-D89 DCE Female, 8-pack	AF110A

**NOTE:** For additional information regarding KVM switches, Serial Console servers, rack mount monitors, keyboards and all related options please see the following URL: <http://www.hp.com/go/kvm>

<b>Service and Support Offerings (HP Care Pack Services)</b>	<b>Hardware Services 4-Hour On-site Service</b>	
	13-Hour x 5-Day Coverage, 3 Years, Electronic	U9509E
	24-Hour x 7-Day Coverage, 3 Years, Electronic	U9510E
	<b>Hardware Services Next Business Day On-Site Service</b>	
	9-Hour x 5-Day Coverage, 3 Years, Electronic	U9508E
	<b>Hardware Services 6-Hour Call to Repair On-Site Service</b>	
	6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U9511E
	Hardware Installation, Electronic	U9520E

**NOTE:** For more information, customer/resellers can contact <http://www.hp.com/services/carepack>



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Memory

#### HP ProLiant DL140 G3 (all models)

**NOTE:** Memory configurations listed do not apply to "Factory Integrated Models".

#### Standard Memory

1 GB (2 x 512 MB) PC2-5300 Fully Buffered DIMM memory, with Advanced ECC Capabilities Memory installed.

#### Maximum Memory

Up to 32GB memory is available with the optional installation of PC2-5300 Fully Buffered DIMM memory kits.

**NOTE:** Memory should be installed in pairs and matched for optimum performance.

**NOTE:** Chart does not represent all possible memory configurations.

Memory	Slot							
	1	2	3	4	5	6	7	8
Standard (1 GB)	512 MB	Empty	512 MB	Empty	Empty	Empty	Empty	Empty
Maximum (32 GB)	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB

Following are memory options available from HP:

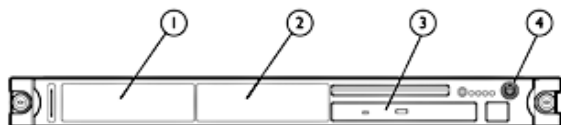
1 GB FBD PC2-5300 2X512 Kit	397409-B21
2 GB FBD PC2-5300 2X1GB Kit	397411-B21
4 GB FBD PC2-5300 2X2GB Kit	397413-B21
8 GB FBD PC2-5300 2X4GB Kit	397415-B21



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Storage



- 1,2 Two Non-hot plug SATA or Two 3.5" Hot Plug SAS/SATA Hard Drive Bays
- 3 Optional CD-ROM, DVD-ROM, DVD RW, DVD/CD RW
- 4 Power On/Off

### Drive Support

#### Removable Media

	Quantity Supported	Position Supported	Controller
IDE (ATAPI) CD-ROM Drive	Up to 1	3	Integrated IDE (ATAPI) (optional)
DVD-ROM	Up to 1	3	Integrated IDE (ATAPI) (optional)
DVD RW	Up to 1	3	Integrated IDE (ATAPI) (optional)
DVD/CD RW	Up to 1	3	Integrated IDE (ATAPI) (optional)

#### Hard Drives

##### SATA - Non-Hot Plug

	Quantity Supported	Position Supported	Controller
<b>3.5-inch</b>			
80GB 7,200 rpm	Up to 2	1;2	HP Embedded SATA RAID Controller
160GB 7,200 rpm	Up to 2	1;2	HP Embedded SATA RAID Controller
250GB 7,200 rpm	Up to 2	1;2	HP Embedded SATA RAID Controller
500GB 7,200 rpm	Up to 2	1;2	HP Embedded SATA RAID Controller

##### SAS/SATA Hot Plug

	Quantity Supported	Position Supported	Controller
<b>3.5-inch</b>			
80GB SATA 7,200 rpm	Up to 2	1;2	See Storage Controller Section
160GB SATA 7,200 rpm	Up to 2	1;2	See Storage Controller Section
250GB SATA 7,200 rpm	Up to 2	1;2	See Storage Controller Section
500GB SATA 7,200 rpm	Up to 2	1;2	See Storage Controller Section
750GB SATA 7,200 rpm	Up to 2	1;2	See Storage Controller Section
36GB SAS 15,000 rpm	Up to 2	1;2	See Storage Controller Section
72GB SAS 15,000 rpm	Up to 2	1;2	See Storage Controller Section
146GB SAS 15,000 rpm	Up to 2	1;2	See Storage Controller Section
300GB SAS 15,000 rpm	Up to 2	1;2	See Storage Controller Section



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Storage

#### Tape Drives

**NOTE:** For an up-to-date listing of the latest O/S Support details for each of the Tape Drives listed below, please see the following:

<http://h18000.www1.hp.com/products/quickspecs/Division/10233.html> (Worldwide)

**NOTE:** For complete listing of tape drive offerings see

<http://www.hp.com/products1/storage/compatibility/tapebackup/ISS/index.html>

For recommended tape drive offerings for this ProLiant server see the following:

	Position Supported	Controller	Controller/HBA Option Kit Part Number
<b>HP StorageWorks USB Tape Drives, External</b> DAT 40 USB DAT 72 USB	External	USB 2.0 Port	N/A
<b>HP StorageWorks SCSI Tape Drives, External</b> Ultrium 232 DAT 40 DAT 72	External	HP SC11Xe Host Bus Adapter	412911-B21
<b>HP StorageWorks SCSI Rack-mount Tape Drive Enclosures</b> 1U Rack-Mount Kit	External	HP SC11Xe Host Bus Adapter	412911-B21



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Power Specifications

**650W Power Supply Spare Kit** 416349-001

**Operational Input Voltage Range (Vrms)** 90Vac to 264Vac full range

**Frequency Range (Nominal) (Hz)** 47 Hz to 63 Hz

<b>Nominal Input Voltage (Vrms)</b>	100	115	200	220	230	240
<b>Max Rated Output Wattage Rating</b>	653.10	653.19	653.08	652.96	653.08	652.96
<b>Nominal Input Current (A rms)</b>	8.55	7.31	4.12	3.77	3.6	3.46
<b>Max Rated Input Wattage Rating (Watts)</b>	855	840.72	824.12	827.5	806.3	805.71
<b>Max. Rated VA (Volt-Amp)</b>	990	990	990	990	990	990
<b>Efficiency (%)</b>	76.39	77.69	79.25	78.91	81	81.04
<b>Power Factor</b>	0.998	0.997	0.983	0.976	0.973	0.969
<b>Leakage Current (mA)</b>	<3.5mA	<3.5mA	<3.5mA	<3.5mA	<3.5mA	<3.5mA
<b>Maximum Inrush Current (A peak)</b>	60A	60A	60A	60A	60A	60A
<b>Maximum Inrush Current Duration (mS)</b>	1mS	1mS	1mS	1mS	1mS	1mS





# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### System Specifications

#### Power

ProLiant DL140 G3 Fully Configured	115V/60Hz	220V/50Hz
Fully Loaded System Input Wattage (W)	651	638
Fully Loaded System Input Current (A rms)	5.7	3.0
Fully Loaded System Thermal (BTU- Hr)	2218	2174
Fully Loaded System VA (Volt-Amp)	657	657
System Leakage with all power supplies loaded (mA)	1.58	3.03
System Inrush Current with all power supplies loaded (A)	19	37

Power cord requirements Nema 5-15P to IEC320-C13 IEC320-C13 to IEC320-C14

**NOTE:** Power shown is for a fully configured system consisting of (2) CPU, (8) double-sided DIMMs, (2) HDDs, (1) CD-ROM, and (2) PCI cards.

Power Cord AF556A



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Technical Specifications

System Unit	Dimensions (HxWxD) (with feet)	1.70 x 16.78 x 26.62 in (4.32 x 42.62 x 67.62 cm)		
	Weight (approximate)	35 lb (15.87 kg)	Fully configured	
	Input Requirements (per power supply)	Range Input Voltage	90 to 140 VAC/180 to 264 VAC	
		Normal Line Voltage	115 or 230 VAC	
	Line Frequency	47 to 63 Hz		
	Rated Input Current load	7.31A at 115VAC, 3.6A at 230VAC		
	BTU Rating	BTU-Hr	2228	
	Power Supply Output Power (per power supply)	Rated Steady-State Power	653W	
		Maximum Peak Power		
	Temperature Range	Operating	50° to 95° F (10° to 35° C)	
		Shipping	-40° to 140° F (-40° to 60° C)	
	<b>NOTE:</b> All temperature ratings shown are for sea level. An altitude derating of 1° C per 304.8 m (1.8°F per 1,000 ft) to 3048 m (10,000 ft) is applicable. No direct sunlight allowed. Upper operating limit is 3,048m (10,000 ft) or 70 Kpa/10.1 psia. Upper non-operating limit is 9,144 m (30,000 ft) or 30.3KPa/4.4 psia. System performance may be reduced if operating above 30° C.			
	Relative Humidity (non-condensing)	Operating	10% to 85%	
		Non-operating	10% to 95%	
Acoustic Noise	Idle (Fixed Disk Drives Spinning)			
	L WAd (BELS)	6.21		
	Operating (Random Seeks to Fixed Disks)			
	L WAd (BELS)	6.29		

Non-Hot Plug SATA Hard Drives	80 GB 7.2K 383410-B21	Capacity	80027 MB		
		Height	1.028 in (2.61 cm)		
		Width	4.0 in (10.16 cm)		
		Interface	SATA 150		
		Transfer Rate Synchronous (Maximum)	150 MB/s		
		Seek Time (typical reads, including settling)	Single Track	0.8 ms	
			Average	9.0 ms	
			Full-Stroke	17.0 ms	
		Rotational Speed	7,200 rpm		
		Physical Configuration	Bytes/Sector	512	
			Logical Blocks	160,086,528	
		Operating Temperature	41° to 131° F (5° to 55° C)		



# QuickSpecs

## HP ProLiant DL140 Generation 3 (G3)

### Technical Specifications

<b>Two embedded NC320i PCIe Gigabit Server Adapters</b>	<b>Network Interface</b>	10Base-T/100Base-TX/1000Base-TX	
	<b>Compatibility</b>	IEEE 802.3 10Base-T	
		IEEE 802.3 1000Base-T	
		IEEE 802.3 100Base-TX	
	<b>Data Transfer Method</b>	64-bit, 133MHz PCI(X)1.0	
	<b>Network Transfer Rate</b>	<b>10Base-T</b> (Half-Duplex)	10 Mb/s
		<b>10Base-T</b> (Full-Duplex)	20 Mb/s
		<b>100Base-TX</b> (Half-Duplex)	100 Mb/s
		<b>100Base-TX</b> (Full-Duplex)	200 Mb/s
		<b>1000Base-TX</b> (Half and Full-Duplex)	2000 Mb/s
	<b>Connector</b>	RJ-45	
	<b>Cable Support</b>	<b>10Base-T</b>	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)
		<b>10/100/1000Base-TX</b>	Category 5 UTP (2 Pair); up to 328 ft (100 m)

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For hard drives, 1 GB = 1 billion bytes. Actual formatted capacity is less.

